

## Contents of *Aquaculture*, Volume 88

**VOL. 88 NO. 1****1 JULY 1990****Review****Cyanobacteria in fish ponds**

- J. Sevrin-Reyssac and M. Pletikosic (Paris, France) ..... 1

**Genetics and Breeding****Genetic drift and effective population sizes of hatchery-propagated stocks of the Pacific oyster, *Crassostrea gigas***

- D. Hedgecock and F. Sly (Bodega Bay, CA, U.S.A.) ..... 21

**Husbandry and Management****Estimating the carrying capacity of a coastal inlet for mussel culture**

- C.E.A. Carver and A.L. Mallet (Halifax, N.S., Canada) ..... 39

**Effects of *Oreochromis niloticus* females on the growth and yield of male hybrids (*O.***

- niloticus* female  $\times$  *O. hornorum* male) cultured in earthen ponds  
L.L. Lovshin (Auburn, AL, U.S.A.), A.B. Da Silva, A. Carneiro-Sobrinho and F.R.

- Melo (Ceara, Brazil) ..... 55

**Effects of manuring regime and stocking rate on primary production and yield of tilapia using liquid swine manure**

- D.R. Teichert-Coddington (Auburn, AL, U.S.A.), L.L. Behrends (Muscle Shoals, AL, U.S.A.) and R.O. Smitherman (Auburn, AL, U.S.A.) ..... 61

**Nutrition****Preparation of oils, enhanced in highly unsaturated fatty acid (HUFA) content, by low temperature crystallization separation, for rotifer (*Brachionus plicatilis*) enrichment**

- G.Wm. Kissil and W.M. Koven (Eilat, Israel) ..... 69

**Growth, feed conversion and protein utilization of Florida red tilapia fed isocaloric diets with different protein levels in seawater pools**

- A.E. Clark (Riviera Beach, FL, U.S.A. and Exuma Cays, Bahamas), W.O. Watanabe (Sopchopy, FL, U.S.A.), B.L. Olla (Newport, OR, U.S.A.) and R.I. Wicklund (Riviera Beach, FL, U.S.A. and Exuma Cays, Bahamas) ..... 75

**Riboflavin requirements in on-growing rainbow trout, *Oncorhynchus mykiss***

- M.R. Amezaga and D. Knox (Aberdeen, Great Britain) ..... 87

**VOL. 88 NO. 2****15 JULY 1990****Review****Freshwater prawn culture: a review**

- M.B. New (Bangkok, Thailand) ..... 99

**Diseases, Parasites and Predators**

- Predation on cultivated oysters, *Crassostrea rhizophorae* (Guilding), by the polyclad turbellarian flatworm, *Stylochus (Stylochus) frontalis* Verrill  
 D.T.J. Littlewood (Port Norris, NJ, U.S.A.) and L.A. Marsbe (St. Thomas, Jamaica) .. 145

**Genetics and Breeding**

- Selection for larval freshwater tolerance in *Macrobrachium nipponense* (de Haan)  
 J.T.Y. Wong and B.J. McAndrew (Stirling, Great Britain) ..... 151

**Husbandry and Management**

- Use of saline ground water for intensive rearing of *Ruditapes philippinarum* juveniles in a nursery system  
 J.-P. Baud (Bouin, France) and C. Bacher (La Tremblade, France) ..... 157
- The comparison of two simple protocols designed to initiate and stimulate ammonia oxidation in closed aquaculture systems  
 J. Perfettini and M. Bianchi (Marseille, France) ..... 179

**Physiology and Endocrinology**

- Development of a homologous radioimmunoassay for a gonadotropin of the gilthead seabream, *Sparus aurata*  
 Y. Zohar (Eilat, Israel), B. Breton, E. Sambroni, A. Fostier (Rennes, France), M. Tosky, G. Pagelson and D. Leibovitz (Eilat, Israel) ..... 189

**VOL. 88 NOS. 3/4****1 AUGUST 1990****Diseases, Parasites and Predators**

- Quantitative and qualitative differences in the antibodies produced by immunosuppressed rainbow trout, *Oncorhynchus mykiss*, to *Aeromonas salmonicida*  
 M.F. Tatner (Stirling, Great Britain) ..... 205
- Isolation and characterization of an *Edwardsiella* sp. strain, causative agent of mortalities in sea bass (*Dicentrarchus labrax*)  
 A.R. Blanch, R.M. Pintó and J.T. Jofre (Barcelona, Spain) ..... 213

**Economics and Marketing**

- Bioeconomic analysis of fish growth: effects of dietary protein and ration size  
 O.J. Cacho, U. Hatch and H. Kinnucan (Auburn, AL, U.S.A.) ..... 223

**Genetics and Breeding**

- Electrophoretic comparison of the reproductive success of naturally spawning transplanted and wild steelhead trout through the returning adult stage  
 S.A. Leider, P.L. Hulett, J.J. Loch and M.W. Chilcote (Olympia, WA, U.S.A.) ..... 239
- Inheritance of allozymes in Atlantic salmon (*Salmo salar* L.)  
 W.W. Crozier and I.J.J. Moffett (Coleraine, Northern Ireland) ..... 253
- Comparison of electrophoretic allele frequencies and genetic variability of common carp stocks from Indonesia and Japan  
 K. Sumantadinata (Bogor, Indonesia) and N. Taniguchi (Nankoku, Japan) ..... 263
- Problems associated with tetraploid induction and survival in grass carp, *Ctenopharyngodon idella*  
 J.R. Cassani, D.R. Maloney, H.P. Allaire (Fort Myers, FL, U.S.A.) and J.H. Kerby (Kearneysville, WV, U.S.A.) ..... 273

Influence of selective breeding, geographic origin, and disease on gametogenesis and sex ratios of oysters, <i>Crassostrea virginica</i> , exposed to the parasite <i>Haplosporidium nelsoni</i> (MSX)	285
S.E. Ford, A.J. Figueras and H.H. Haskin (Port Norris, NJ, U.S.A.)	
<b>Husbandry and Management</b>	
Growth of <i>Crassostrea cucullata</i> Born (Bivalvia) at different levels in the intertidal zone	303
R.K. Ruwa (Mombasa, Kenya)	
<b>Nutrition</b>	
Effects of diet and temperature on food consumption, growth rate and tissue fatty-acid composition of triploid grass carp	313
Z. Cai and L.R. Curtis (Corvallis, OR, U.S.A.)	
Growth responses of <i>Tilapia zillii</i> fed diets containing various levels of ascorbic acid and cobalt chloride	329
D.I. Anadu, O.C. Anozie and A.D. Anthony (Jos, Nigeria)	
The role of exogenous enzymes in digestion in cultured turbot larvae ( <i>Scophthalmus maximus</i> L.)	337
R. Munilla-Moran, J.R. Stark (Edinburgh, Great Britain) and A. Barbour (Hunsterston, Great Britain)	
Effects of dietary canthaxanthin level and lipid level on apparent digestibility coefficients for canthaxanthin in rainbow trout ( <i>Oncorhynchus mykiss</i> )	351
O.J. Torrissen, R.W. Hardy, K.D. Shearer, T.M. Scott and F.E. Stone (Seattle, WA, U.S.A.)	
Reversibility of artificial feed-induced hepatocyte disturbances in cultured juvenile sea bass ( <i>Dicentrarchus labrax</i> ): an ultrastructural study	363
N. Mosconi-Bac (Perpignan, France)	
<b>Physiology and Endocrinology</b>	
High stocking density alters the energy metabolism of brook charr, <i>Salvelinus fontinalis</i>	371
M.M. Vijayan, J.S. Ballantyne and J.F. Leatherland (Guelph, Ont., Canada)	
<b>Book Reviews</b>	
Recent advances in aquaculture	383
Information sources in aquaculture	385
Clam mariculture in North America	386
Colour atlas of rainbow trout histology	388
Integrated agriculture-aquaculture in China	389
The estuarine ecosystem	390
<b>Announcements</b>	392
<b>Author Index</b>	393
<b>Contents of Aquaculture, Volume 88</b>	397